

UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF MISSOURI
EASTERN DIVISION

UNITED STATES OF AMERICA,)	
)	
Plaintiff,)	
)	
v.)	Case No. 4:19-cr-00980-HEA-JMB
)	
HAITAO XIANG,)	
)	
Defendant.)	

GOVERNMENT’S RESPONSE IN OPPOSITION TO DEFENDANT’S
MOTION FOR BILL OF PARTICULARS

COMES NOW the United States of America, by and through its attorneys, Jeffrey B. Jensen, United States Attorney for the Eastern District of Missouri, and Matthew T. Drake and Gwendolyn Carroll, Assistant United States Attorneys for said District, and for its Response in Opposition to Defendant’s Motion for Bill of Particulars, states as follows.

Defendant Haitao Xiang moves this Court for an Order requiring the government to file a Bill of Particulars with regard to the Indictment (Doc. No. 17), alleging, in summary, that the Indictment fails to allege sufficient facts concerning the trade secret at issue in Counts 1-8. The defendant requests that the government “identify with precision the allegedly stolen trade secret.” Doc. No. 59 at 9. As the defendant’s filing acknowledges, the government has both (a) provided, in discovery, the trade secret, to wit, the 86-page document that contains the scientific methodology and research that comprise the “Nutrient Optimizer” as described in the Indictment, and (b) repeatedly identified the 86-page document as the “trade secret” alleged in the Indictment. Doc. No. 59 at 1. The government opposes this Motion for the reasons set forth herein and respectfully submits that the Motion should be denied.

PROCEDURAL HISTORY

On or about November 21, 2019, a Grand Jury sitting in the Eastern District of Missouri returned an Indictment charging the defendant with four counts of actual or attempted violations of the Economic Espionage Act, 18 U.S.C. § 1831, and four counts of actual or attempted theft of trade secrets in violation of 18 U.S.C. § 1832.

The twenty-page Indictment includes a lengthy section entitled “Monsanto and TCC Technology,” which outlines Monsanto’s research and development concerning agricultural technology. Doc. No. 17 at 4-9. The Indictment also describes how Monsanto and TCC “over the course of numerous years. . . researched and developed a digital, on-line farming software platform. The platform was used by farmers to collect, store, and visualize critical agricultural field data. *Id.* para. 12. The Indictment further alleges that

A primary application within the [digital, on-line software] platform was a scientific formula and methodology that provided farmers guidance concerning the optimal application and use of nutrients as fertilizer components. Within that application, Monsanto and TCC developed a Nutrient Optimizer that was a proprietary predictive algorithm to assist farmers in the optimal application of plant nutrients. The Nutrient Optimizer was an essential component of the digital farming software platform. . . It was also part of the application that worked as a web-based tool that allowed farmers to monitor the nutrient status of their fields.

Doc. No. 17 at 4, para. 13.

As the government has previously explained to defense counsel, the term “Nutrient Optimizer” is a pseudonym for the title of the 86-page document referred to in these pleadings and provided to the defendant. The pleadings use this pseudonym in an effort to safeguard Monsanto/TCC’s proprietary interests. The 86-page Nutrient Optimizer is an internal technical document that sets forth in detail the methodology for designing a proprietary predictive algorithm that advises farmers on the optimal application of certain agricultural inputs based on both plot-specific and climate-specific variables. Like a software “white paper,” the purpose of the Nutrient

Optimizer was to describe the research conclusions behind the algorithm's development and to enable TCC's scientists to convey the technical details of how the predictive algorithm would operate to programmers, who would then translate those technical details into the code of the commercially available software platform. Some of the variables incorporated into the predictive algorithm are based on publicly available information, but the particular way in which they are used in the algorithm is not public. In addition, to help guide the programmers' work, the Nutrient Optimizer also contains explanations of how the proprietary predictive algorithm will operate differently than certain publicly available alternatives.

The Indictment further describes component parts of the Nutrient Optimizer and trade secret at issue in more specific terms as follows:

Monsanto and TCC considered the Nutrient Optimizer to be confidential, proprietary information and a highly valuable trade secret as defined in 18 U.S.C. § 1839(3). Monsanto and TCC's Nutrient Optimizer was a point-based biogeochemical process, comprised of the following categories or software modules of proprietary technology:

- a. A crop growth module, which simulated plant growth and nutrient uptake that was business, scientific, technical, economic, or engineering information. It included patterns, plans, compilations, program devices, formulas, designs, methods, techniques, processes, procedures, programs, or codes;
- b. A surface hydrology module, which described moisture dynamics between precipitation and infiltration that was business, scientific, technical, economic, or engineering information. It included patterns, plans, compilations, program devices, formulas, designs, methods, techniques, processes, procedures, programs, or codes;
- c. A soil moisture module, which simulated water availability and distribution in the soil that was business, scientific, technical, economic, or engineering information. It included patterns, plans, compilations, program devices, formulas, designs, methods, -techniques, processes, procedures, programs, or codes;
- d. A surface and soil temperature module, which simulated the temperature at the top of the soil surface as well as subsurface soil temperatures that was business, scientific, technical, economic, or engineering information. It

included patterns, plans, compilations, program devices, formulas, designs, methods, techniques, processes, procedures, programs, or codes;.

e. A soil chemistry module; which simulated the nutrient movement and, associated processes within an agricultural soil that was business, scientific, technical, economic, or engineering information. It included patterns, plans, compilations, program devices, formulas, designs, methods, techniques, processes, procedures, programs, or codes; and

f. A tillage, harvest, and crop residue module, which described how farmer practices might impact the soil system and other modules that was business, scientific, technical, economic, or engineering information. It included patterns, plans, compilations, program devices, formulas, designs, methods, techniques, processes, procedures, programs, or codes.

Working together, these six modules formed the Nutrient Optimizer, and the overall point-based biogeochemical process that ultimately powered the digital platform.

Doc. No. 17 at 5, para. 15.

Thus, the Indictment alleged what the trade secret is, what it is comprised of, what it does and how it operates. Furthermore, in discovery and through oral discussions, the government identified the Nutrient Optimizer to the defendant as the trade secret.

Pursuant to the protective order issued on May 7, 2020, the government produced the trade secret, the 86- page document referred to in the Indictment as the “Nutrient Optimizer,” which is the trade secret as alleged in the Indictment. As the defendant acknowledges, the government has repeatedly “restated” to the defendant that the 86-page document is the trade secret identified in the Indictment. Doc. No. 52; Doc. No. 59 at 1.

ARGUMENT

The defendant requests that this Court direct that the government file a Bill of Particulars “on the contours of the alleged trade secret at issue.” Doc. No. 58 at 1. “The purpose of a bill of particulars is to inform the defendant of the nature of a charge with ‘sufficient precision to enable him to prepare for trial’ and ‘to avoid or minimize the danger of surprise at trial.’” *United States*

v. Livingstone, 576 F.3d 881, 883 (8th Cir. 2009) (quoting *United States v. Hernandez*, 299 F.3d 984, 989–90 (8th Cir. 2002), *cert. denied*, 537 U.S. 1134 (2003)). A bill of particulars is designed to (1) sufficiently inform the defendant of the nature of the charges brought against him to enable him to adequately prepare his defense; (2) avoid surprise during the trial and (3) protect him against a second prosecution for an inadequately described offense and plead double jeopardy if he is later charged with the same crime when the indictment itself is too vague and indefinite for such purposes. *United States v. Moyer*, 674 F.3d 192, 203 (3rd Cir. 2012). *See also United States v. Birmley*, 529 F.2d 103, 108 (6th Cir. 1976). A defendant has no constitutional and “no unconditional right to a bill [of particulars].” *United States v. Bales*, 813 F.2d 1289, 1294 (4th Cir. 1987).

A. The Indictment Sufficiently Apprises the Defendant of the Charges to Enable Him to Prepare for Trial.

The test for whether a bill of particulars is necessary is whether indictment sets forth elements of offense charged and sufficiently apprises the defendant of charges to enable him to prepare for trial. *United States v. Kendall*, 665 F.2d 126, 134 (7th Cir. 1981) (internal citations omitted). Far from being a legal entitlement, the necessity of a bill of particulars depends both on the sufficiency of the allegations in the indictment and on the information already available to the defendant through discovery. The level of detail in the indictment can be a basis for denying the motion for a bill of particulars. “A sufficiently specific indictment obviates the need for a bill of particulars.” *United States v. Groves*, No. 5:12-CR-00043, 2013 WL 5592911, at *1 (W.D. Ky. Oct. 10, 2013); *see also United States v. Salisbury*, 983 F.2d 1369, 1375 (6th Cir.1993). As the Supreme Court has explained, “[a]n indictment is sufficient if it, first, contains the elements of the offense charged and fairly informs a defendant of the charge against which he must defend, and, second, enables him to plead an acquittal or conviction in bar of future prosecutions for the same

offense.” *Hamling v. United States*, 418 U.S. 87, 117 (1974); *see, e.g., United States v. Mann*, 701 F.3d 274, 288 (8th Cir. 2012). An indictment “is normally sufficient if its language tracks the statutory language.” *United States v. Sewell*, 513 F.3d 820, 821 (8th Cir. 2008); *see, e.g., United States v. Hill*, 386 F.3d 855, 859 (8th Cir. 2004; *United States v. Hill*, 589 F.2d 1344, 1352 (8th Cir.), *cert. denied*, 442 U.S. 919 (1979).

In *Groves*, the district court denied the defendant’s motion seeking a bill of particulars “directing the government to specify the scope of the trade secrets alleged to have been stolen,” holding that “[t]he Indictment is sufficiently clear to allow Groves to discern the essential nature of the offenses with which he is charged.” *Groves*, 2013 WL 5592911, at *1-2. The district court found that the bill of particulars more specifically identifying the trade secrets was unwarranted where the Indictment stated that the trade secrets were found in documents belonging to White Drive Products, Inc., identified the dates upon which the crimes were allegedly committed and notified Groves of the actions he was accused of taking in violation of the statute. *Groves*, 2013 WL 5592911, at *2. *See also United States v. Latimore*, No. 08-CR-20633, 2009 WL 3876171, at *3 (E.D. Mich. Nov. 17, 2009) (magistrate judge denying a motion for bill of particulars in a theft of trade secrets case where the indictment had tracked the elements of the statutes and the defendant had been provided with the trade secret documents in discovery).

As in *Groves* and *Latimore*, the Indictment in this case fully informs the defendant of the charges against him, contains the elements of the offense, tracks the languages of 18 U.S.C. Sections 1831 and 1832 and “enables him to plead an acquittal or conviction in bar of future prosecutions for the same offense.” *Hamling*, 418 U.S. at 117. As described in the prior section, the Indictment identifies the trade secret, the Nutrient Optimizer, in great detail. The government provided the 86 page Nutrient Optimizer to the defendant and identified it as the trade secret

referenced in the Indictment. The Indictment provides a detailed description of the trade secret itself and its component parts, explains how the Nutrient Optimizer (the trade secret) fits into Monsanto and TCC's business model, and identifies the methods Monsanto and TCC used to protect the trade secret. The Indictment alleges the dates upon which the crimes were allegedly committed. The Indictment also notifies the defendant of the specific acts he is alleged to have committed in furtherance of the charged offenses. Doc. No. 17 at Paragraphs 28(a)-(l). In short, although the defendant may not agree with the Indictment's allegation that the Nutrient Optimizer constitutes a trade secret, there is certainly more than enough information available to him to inform him of the government's position as to what constitutes the trade secret, as well as the acts he is alleged to have committed in furtherance of his theft of said trade secret.

B. In Addition to the Indictment, the Discovery Provided to the Defendant Also Obviates the Need for a Bill of Particulars.

Here, in addition to an extensive and detailed speaking indictment, the defendant has also received the trade secret itself in discovery. In *United States v. Roberts*, the magistrate judge denied the defendant's motion for a bill of particulars seeking "(1) the trade secret information allegedly 'contained' in Goodyear's roll over-ply down device." No. 3:08-CR-175, 2009 WL 4060006, at *2 (E.D. Tenn. Nov. 20, 2009), *aff'd sub nom. United States v. Howley*, 707 F.3d 575 (6th Cir. 2013). The magistrate judge reasoned that a bill of particulars was unwarranted when government counsel had informed the defendant "that the device itself—every part of the roll over-ply down device—is a trade secret." *Id.* at *3. As in *Roberts*, the defendant in this case has been apprised by government counsel, as the defendant's filing acknowledges, that voluminous discovery that is more than sufficient to "inform [him] of the nature of a charge with 'sufficient precision to enable him to prepare for trial' and 'to avoid or minimize the danger of surprise at trial.'" *Livingstone*, 576 F.3d at 883. As the *Groves* court recognized in denying the defendant's

request for a bill of particulars more specifically identifying the trade secret, a bill of particulars is unwarranted “where the government has provided access to details about the charges in a case, a bill of particulars is unnecessary.” *Groves*, 2013 WL 5592911, at *1 (citing *United States v. Fassnacht*, 332 F.3d 440, 447 n. 2 (7th Cir.2003); *United States v. Giese*, 597 F.2d 1170, 1180 (9th Cir.1979) (if there has been full disclosure by the government, then a bill of particulars is unnecessary)); *see also United States v. Walsh*, 194 F.3d 37, 45 (2d Cir. 1999); *United States v. Diaz*, 303 F. Supp. 2d 84, 88-89 (D. Conn. 2004) (citation omitted) (“In determining whether the defendant has received sufficient information to allow him to prepare for trial, a court should consider any information obtained by the defendant through discovery, as well as that contained within the indictment.”).

The need for a bill of particulars is obviated in cases where the government has provided fulsome discovery and access to details about the charges in the case. In *United States v. Asgari*, No. 1:16-CR-124, 2018 WL 454238, at *1 (N.D. Ohio Jan. 17, 2018), the district court denied the defendant’s motion for a bill of particulars in a theft of trade secrets case, reasoning that

While Asgari must know what trade secrets he is accused of stealing in order to effectively prepare a defense to the charge of stealing trade secrets, the government has sufficiently provided him with that information in this case. The indictment describes the trade secrets as ‘technical specifications regarding the progressive steps of heat treatments using Company A’s process for the treatment of metals.’ And while the expert report provides no description of the trade secrets, the government has provided Asgari with fairly extensive discovery that should be sufficient to apprise him of the information the government may claim amounts to a trade secret.

See also Giese, 597 F.2d at 1180 (if there has been full disclosure by the government, there is no need for a bill of particulars).

In *United States v. Fei Ye*, 436 F.3d 1117 (9th Cir. 2006), the government appealed the district court’s granting the defendants’ motion to depose the government’s expert witnesses prior

to trial. The defendants sought those depositions “so that defendants could obtain information on ‘what exactly is being alleged to be the trade secret and why it is a trade secret in advance of trial.’” *Id.* at 1119. The Court of Appeals vacated the district court’s order, noting that, as is the case here, “‘all the trade secret materials’ in the case had already been provided to defendants pursuant to a protective order[.]” *Id.*

In addition to producing the trade secret itself, the government has provided robust discovery, well beyond the scope of its Rule 16 obligations. The government has produced virtually the entire FBI file, as well as documents establishing the defendant’s extensive familiarity with the trade secret at issue in this case, including employment records and reports of interview that indicate that the defendant had access to, was familiar with, and worked on developing the Nutrient Optimizer while he was employed at TCC. As indicated *supra*, although the defendant may contest that the Nutrient Optimizer is a trade secret, the discovery provided to him can leave no doubt as to his familiarity with the document constituting the trade secret at issue.

C. A Bill of Particulars May Not Be Used to Obtain a Preview of the government’s Legal Theories.

A bill of particulars is required only where the defendant would suffer “actual surprise and substantial prejudice” at trial. *United States v. Rey*, 923 F.2d 1217, 1222 (6th Cir. 1991). “The ultimate test must be whether the information sought is necessary, not whether it is helpful,” and therefore “[t]he government may not be compelled to provide a bill of particulars disclosing the manner in which it will attempt to prove the charges, the precise manner in which the defendant committed the crime charged, or a preview of the government’s evidence or legal theories.” *United States v. Fennell*, 496 F.Supp. 2d 279, 284 (S.D.N.Y. 2007).

Further, as the Eighth Circuit has repeatedly made clear, “a bill of particulars is not a discovery device to be used to require the government to provide a detailed disclosure of the

evidence that it will present at trial.” *Livingstone* 576 F.3d at 883 (citing Fed.R.Crim.P. 7(f)). *See also United States v. Huggans*, 650 F.3d 1210, 1220 (8th Cir. 2011); *United States v. Shepard*, 462 F.3d 847, 860 (8th Cir. 2006); *United States v. Salisbury*, 983 F.2d 1369, 1375 (6th Cir. 1993) (“A bill of particulars is not to be used for discovery purposes.”). A bill of particulars is not intended to provide the defendant with evidentiary detail or discovery regarding the government’s case. *United States v. Hester*, 917 F.2d 1083, 1084 (8th Cir. 1990).

A request for a bill should be denied if the information sought would simply be helpful to the defense, rather than strictly necessary to a fair trial. *United States v. Matlock*, 675 F.2d 981 (8th Cir. 1982) (“Acquisition of evidentiary detail is not the function of the bill of particulars”) (citing *Hemphill v. United States*, 392 F.2d 45, 49 (8th Cir.), *cert. denied*, 393 U.S. 877 (1968)). Furthermore, a bill of particulars “is not meant as a tool for the defense to obtain detailed disclosure of all evidence held by the government before trial.” *United States v. Crayton*, 357 F.3d 560, 568 (6th Cir. 2004) (internal citation omitted).

While defendant asserts that he “does not seek a bill of particulars as a discovery tool or to seek early disclosure of the government’s trial evidence,” he simultaneously argues that a bill of particulars is needed so that the defendant “is not required to guess which parts of the document the government may ultimately claim at trial are a protected trade secret.” Doc. No. 59 at 8, 2. This inconsistency in reasoning evidences the fact that the defendant’s true concern is not that he lacks sufficient information to discern the identity and scope of the alleged trade secret, but rather, his disagreement with the government’s position that the Nutrient Optimizer, as alleged in the indictment and provided in discovery, does not constitute a trade secret. The issue is not properly the subject of a bill of particulars, but instead, a question to be determined by the jury.

D. A Combination Trade Secret May Include, and Even Consist Entirely Of, Publicly Available Information.

As argued *supra*, the defendant's Memorandum in Support of his motion makes clear that what is at issue here is not whether the defendant has sufficient information to understand that the 86-page document is the alleged trade secret, but rather, his dispute with the government's position that the 86-page document is a trade secret. Indeed, the defendant says that the "entire 86-page document...cannot be" a trade secret because it is "replete with information that is obviously within the public domain and generally known to those in the industry." Doc. No. 59 at 1-2. This assertion reflects a misunderstanding of trade secret law.

Compilations of scientific information, (a "combination trade secret") are specifically contemplated in the definition of a trade secret. 18 U.S.C. § 1839(3) defines the term "trade secret" as:

all forms and types of financial, business, scientific, technical, economic, or engineering information, including patterns, plans, compilations, program devices, formulas, designs, prototypes, methods, techniques, processes, procedures, programs, or codes, whether tangible or intangible, and whether or how stored, *compiled*, or memorialized physically, electronically, graphically, photographically, or in writing. . . (emphasis added)

The defendant is correct that the 86-page trade secret document includes references to publicly available scientific. However, the fact that some or even most of the information contained in the 86-page document is publicly available does not compromise its status as a trade secret. "[I]t is a well settled principle 'that a trade secret can exist in a combination of characteristics and components, each of which, by itself, is in the public domain, but the unified process and operation of which, in unique combination, affords a competitive advantage and is a protectable secret.'" *Trandes Corp. v. Guy F. Atkinson Co.*, 798 F.Supp. 284, 288 (D.Md.1992) (quoting *Q-Co. Indus., Inc. v. Hoffman*, 625 F.Supp. 608, 617 (S.D.N.Y.1985). *See also 3M v. Pribyl*, 259 F.3d 587, 595–

96 (7th Cir.2001) (“[a] trade secret can exist in a combination of characteristics and components, each of which, by itself, is in the public domain, but the unified process, design and operation of which, in unique combination, affords a competitive advantage and is a protectable secret.”).

Compilations are valuable, not because of the amount of secret information, but because the expenditure of time, effort, and expense involved in its compilation gives a business a competitive advantage. “A trade secrets plaintiff need not prove that every element of an information compilation is unavailable elsewhere. Such a burden would be insurmountable since trade secrets frequently contain elements that by themselves may be in the public domain but taken together qualify as trade secrets.” *Boeing Co. v. Sierracin Corp.*, 108 Wash. 2d 38, 50, 738 P.2d 665, 675 (1987). “Thus, ‘the effort of compiling useful information is, of itself, entitled to protection even if the information is otherwise generally known.’” *Amoco Prod. Co. v. Laird*, 622 N.E.2d 912, 920 (Ind. 1993) (quoting *ISC–Bunker Ramo Corp. v. Altech, Inc.*, 765 F.Supp. 1310, 1322 (N.D.Ill.1990)).

In short, combinations of scientific information, some of which may well be publicly available, can constitute economically valuable trade secrets, not because of the quantum of secret information, but because the expenditure of time, effort, and expense involved in its compilation gives a business a competitive advantage. *Id.*; see also *Penalty Kick Mgmt. Ltd. v. Coca Cola Co.*, 318 F.3d 1284, 1291 (11th Cir. 2003) (“[E]ven if all of the information is publicly available, a unique combination of that information, which adds value to the information, also may qualify as a trade secret.”).

E. Defendant’s Reliance on *Liew*, *Liu* and *Ward* is Misplaced.

The defendant relies in part on an unpublished, out-of-circuit precedent in *United States v. Liew*, No. CR 11-00573-1 JSW, 2013 WL 2605126 (N.D. Cal. June 11, 2013). In *Liew*, the district

court provided a narrow, partial grant of the defendant's motion for a bill of particulars in a case in which the indictment alleged violations of the Economic Espionage Act relating to the defendant's attempted theft of five separate trade secrets, just one of which was a 407 page document. The court reasoned that because the indictment appeared to allege that "Trade Secret 1 is broader than the definitions of Trade Secrets 2 through 5," a bill of particulars was warranted to clarify the alleged belief on the part of the defendants as to whether "the entire chloride-route process to manufacture TiO₂ was a trade secret or whether the [United States] will argue the Defendants reasonably believed a subset of the process was a trade secret." *Id.* at *8. The district court went on to say that only if the government's position was that the alleged trade secret was, indeed, a "subset" of the process, would further clarification be necessary. *Id.* The present case has none of the ambiguities identified by the district court in *Liew*. The indictment does not allege the theft or attempted theft of multiple, subsidiary trade secrets, but instead, a single trade secret – to wit, the scientific methodology and research contained and compiled in the 86-page document the government has previously identified as the trade secret.

The defendant also relies in part on *United States v. Liu*, Case No. 13-cr-226 (W.D.N.Y. Oct. 20, 2016), Doc. No. 180, an unpublished, out-of-circuit, district court order. In *Liu*, the District Court provided a narrow grant of the defendant's motion for a bill of particulars in a case in which the indictment alleged violations of the Economic Espionage Act relating to the defendant's theft of a PowerPoint presentation. In *Liu*, the Court relied in part on an un rebutted affidavit from a defense expert in reaching the conclusion that it was not possible ascertain from a review of the slides what the government claimed to be trade secrets. Additionally, in oral argument the government conceded that it did "not contend that every PowerPoint slide necessarily contains a trade secret, or that every portion of any particular slide constitutes a trade secret." *Id.*

at 4. Unlike *Liu*, here, the defendant has provided no expert affidavit contesting whether the Nutrient Optimizer constitutes a trade secret. Further, here, the government has made no ambiguous concessions like that made by government counsel in *Liu*. The government's position is that the entirety of the 86 page Nutrient Optimizer constitutes the trade secret, and thus, no further clarification is needed as to which portion or excerpt of the document constitutes a trade secret.

The defendant relies chiefly on *United States v. Ward*, also an unpublished out-of-circuit district court opinion. Case No. 11-02123 (E.D. Wa. June 21, 2012). *Ward* is both distinguishable from the present case and reflective of the same misunderstanding of trade secret law as that in the defendant's filing. In *Ward*, the district court granted the defendant's motion to supplement a bill of particulars after the government had identified a "voluminous . . . Integrator Aircraft Maintenance Manual" as the trade secret referenced in the indictment. Preliminarily, the government will note that the trade secret at issue in *Ward* is readily distinguishable from the trade secret in the present case. The trade secret in *Ward* was a "voluminous" aircraft maintenance manual, not an 86-page document describing scientific research and methodology, such as the trade secret at issue in this case.

Further, in granting the defendant's motion, the district court in *Ward* appears to have relied on an erroneous understanding of the law. The district court reasoned that "[i]f the government is contending that the entire manual constitutes one trade secret, then the government is on notice that the Court's present understanding of the law would compel instructing the jury that should any part of the manual be public, and therefore not a trade secret, then the manual as a whole cannot constitute a trade secret." *Id.* at 6. The district court's sole authority for that position was the definition of trade secret found in 18 U.S.C. § 1839(3)(B), which states that a trade secret must

derive “independent economic value...from not being generally known to, and not being readily ascertainable through proper means by, the public.” 1839(3)(B) provides that a “trade secret” *as a whole*, which, under the statutory definition, may consist of a compilation of information, must derive economic value from information not available to the public. However, 1839(3)(B) should *not be read* to mean that each and every sentence in a trade secret document must reflect information unavailable to the public in order to render the document a legally protectable trade secret. Neither the plain text of the statute nor the case law interpreting the definition of trade secret support that position.

The *Ward* court’s statutory interpretation strains credulity and is directly contradicted by a number of courts¹, including the Eighth Circuit, that have explicitly recognized the combination trade secret doctrine. *See, e.g., AvidAir Helicopter Supply, Inc. v. Rolls-Royce Corp.*, 663 F.3d 966, 972-73 (8th Cir. 2011) (a combination/compilation of publicly available and proprietary information can be a trade secret where the compilation provides independent economic value/gives a competitive advantage and is not readily ascertainable because of the effort required to compile the alleged combination secret). In *3M v. Pribyl*, 259 F.3d at 595-96, the Seventh Circuit held that the jury had sufficient evidence to conclude that a 500-page manual constituted a

¹ The cases below, which are civil, address causes of action arising either from state law trade secret theft causes of action, and the state-adopted trade secret definition found in the Uniform Trade Secret Act (“UTSA”), or from the Defend Trade Secrets Act of 2016 (“DTSA”), which created a federal private cause of action for the theft of trade secrets. The DTSA uses the trade secret definition found in 18 U.S.C. § 1839(3), the same definition applicable in the present case. The UTSA trade secret definition, like the DTSA definition of trade secret, recognizes that a trade secret may consist of a “compilation” of information. The scope of what constitutes a trade secret is essentially the same under UTSA and DTSA. *See, e.g.,* H.R. Rep. 114-529 (noting that “the Committee does not intend for the definition of a trade secret to be meaningfully different from the scope of that definition as understood by courts in States that have adopted the UTSA”); *Brand Energy & Infrastructure Servs., Inc. v. Irex Contracting Grp.*, 2017 WL 1105648, at * (E.D. Pa. Mar. 24, 2017) (discussing the congressional intent). Prior to the passage of the Defend Trade Secrets Act of 2016 (“DTSA”), there was no separate federal private cause of action for theft of trade secrets, and federal courts exercised jurisdiction only through diversity. The DTSA relies on the same trade secret definition as that in criminal economic espionage and trade secret cases, that found in 18 U.S.C. § 1839(3).

trade secret, even where the manual included “a host of materials which would fall within the public domain,” because the manual, like the Nutrient Optimizer, contained “a process which it took the company six years and considerable income to perfect.” The Seventh Circuit reasoned that “[t]hese manuals and processes, even if comprised solely of materials available in the public domain, have been created by combining those materials into a unified system which is not readily ascertainable by other means.” *Id.*; *see also Imperial Chem. Indus., Ltd. v. Nat’l Distillers and Chem. Corp.*, 342 F.2d 737, 742-43 (2nd Cir. 1965) (even when all individual parts of a design are within the public domain, the unique combination and assembly of those parts may constitute a trade secret. The fact that a design could have been independently conceived from public information is not a defense to improper disclosure); *AirFacts, Inc. v. de Amezaga*, 909 F.3d 84, 96 (4th Cir. 2018) (flowcharts compiled from publicly available data were not readily ascertainable to others and therefore valuable and a trade secret where an individual with expertise in the data spent months compiling it into a useful format and duplication is difficult); *Protégé Biomedical, LLC v. Z-Medica, LLC*, 394 F. Supp. 3d 924, 939 (D. Minn. 2019) (plaintiff’s technical know-how and patent strategy information was a trade secret despite the fact that certain patent information was posted on plaintiff’s website and therefore publicly available, because the information was combined in unique ways to the plaintiff’s competitive advantage);. In short, virtually every court to consider the definition of a trade secret has recognized the combination/compilation trade secret doctrine, with the exception of the court in *Ward*. Both the language of the statute itself and the law interpreting the definition of trade secret render the defendant’s position untenable. Given the detailed allegations in the Indictment, the government’s repeated and specific representations regarding the identification of the alleged trade secret, the fact that defense counsel is in possession

of the trade secret, as well as the voluminous discovery provided to the defendant, a bill of particulars is not warranted.

Conclusion

Based on the foregoing, the government respectfully requests that the Court **DENY** the defendant's Motion for Bill of Particulars.

Respectfully submitted,

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CERTIFICATE OF SERVICE

The undersigned hereby certifies that on July 16, 2020, the foregoing was filed electronically with the Clerk of the Court to be served by operation of the Court's electronic filing system upon all parties and counsel of record.

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